

DETAILED ACTION

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: Regarding claim 1, the prior art of record, Mantha et al. system for allocating power teaches a device for allocating power comprising a power sharing module configured to receive a plurality of signals corresponding to at least one predicted power allocation (Sections 0015-0017 and 0080 or 105 of Fig. 4) and at least one current power allocation 110 and 115 (Fig. 4) and to determine from the plurality of signals whether a first industry standard (Section 0048) wireless system (voice service) corresponding to a first wireless service has un-utilized transmission power 115 and 120 (Fig. 4); and a scheduler configured to receive an indication to allocate the un-utilized transmission power from the first wireless service of the first industry standard (Section 0048) wireless system to the second wireless service of a second industry standard (Section 0048) wireless system (data service) and utilize the indication to allocate the un-utilized transmission power for the second wireless service 125 (Fig. 4, Sections 0008-0010 and 0057-0069).

Lachtar teaches a first industry standard wireless system 104, 108A/B, and 110A/B (Fig. 1) and a second industry standard wireless system 106, 112A/B, and 114A/B (Fig. 1); and wherein the first industry standard wireless system and the second industry standard wireless system are distinct industry standard wireless systems (both BTS 108A and 108B or 110A and 110B [Fig. 1] are separate which therefore are distinct industry standard wireless systems since they have different coverage areas etc.).

Note, Lachtar deals with allocation (Figs. 1 and 2) between two systems (applicant does not state the two systems are specifically different, ex. CDMA2000 1x for the first and CDMA 2000 1x EVDV for the second) which is similar to applicant's invention of power allocation.

The prior art of record fails to teach a device for allocating power comprising a power sharing module configured to receive a plurality of signals corresponding to at least one predicted power allocation and at least one current power allocation and to determine from the plurality of signals whether a first industry standard wireless system corresponding to a first wireless service has un-utilized transmission power; a scheduler configured to receive an indication to allocate the un-utilized transmission power from the first wireless service of the first industry standard wireless system to a second wireless service of a second industry standard wireless system and utilize the indication to allocate the un-utilized transmission power for the second wireless service; wherein the first industry standard wireless system and the second industry standard wireless system are distinct industry standard wireless systems, and wherein the indication to allocate the un-utilized transmission power is based on subtracting from an overload setting; a current total power utilized by the first industry standard wireless system and the second industry standard wireless system minus the scheduled power in a previous time interval; a delta between a current supplemental power and a predicted supplemental power for the first industry standard wireless system; and a marginal power that comprises at least one parameter setting.

The prior art of record fails to teach the claimed subject matter as claimed and substantially connected in claims 1-6.

Regarding claim 8, Mantha et al. system for allocating power teaches a first baseband (voice service) system that communicates with a first group of the plurality of wireless units 44 (Fig. 1) via a first plurality of communication channels (Fig. 1, V sub 1 to V sub V); and a second baseband system (data service, D sub 1 to D sub z of Fig. 1) that communicates with a second group of the plurality of wireless units 48 (Fig. 1) via a second plurality of communication channels, the first and second baseband systems sharing a platform 24 and 40 (Fig. 1, voice and data systems coming from the same base station) the second baseband system comprising a power sharing module configured to receive a plurality of signals corresponding to a plurality of predicted power allocation (Sections 0015-0017 and 0080 or 105 of Fig. 4) and a plurality of current power allocations 110 and 115 (Fig. 4) and to determine from the plurality of signals whether the second baseband system may allocate power from the first baseband system 110 and 115 (Fig. 4); and a scheduler configured to receive an indication to allocate un-utilized transmission power to the second baseband system from the first baseband system and to utilize the indication to allocate un-utilized transmission power for the second plurality of communication channels 110, 115, 120, and 125 (Fig. 4, Sections 0008-0010 and 0057-0069).

Lachtar teaches a first industry standard wireless system 104, 108A/B, and 110A/B (Fig. 1) and a second industry standard wireless system 106, 112A/B, and 114A/B (Fig. 1) and wherein the first industry standard wireless system and the second

industry standard wireless system are distinct industry standard wireless systems (both BTS 108A and 108B or 110A and 110B [Fig. 1] are separate which therefore are distinct industry standard wireless systems since they have different coverage areas etc.).

Note, Lachtar deals with allocation (Figs. 1 and 2) between two systems (applicant does not state the two systems are specifically different, ex. CDMA2000 1x for the first and CDMA 2000 1x EVDV for the second) which is similar to applicant's invention of power allocation.

Kang's CDMA base station system teaches a radio frequency system having a channel card 103 (Fig. 1) configured to communicate with a plurality of wireless units 111 and 112 (Fig. 1).

The prior art of record fails to teach a base station comprising a radio frequency system having a channel card configured to communicate with a plurality of wireless units; and a baseband system comprising a first baseband system that communicates with a first group of the plurality of wireless units via a first plurality of communication channels; and a second baseband system that communicates with a second group of the plurality of wireless units via a second plurality of communication channels, the second baseband system comprising: a power sharing module configured to receive a plurality of signals corresponding to a plurality of predicted power allocation and a plurality of current power allocations and to determine from the plurality of signals whether the second baseband system may allocate power from the first baseband system; a scheduler configured to receive an indication to allocate un-utilized transmission power to the second baseband system from the first baseband system and

to utilize the indication to allocate un-utilized transmission power for the second plurality of communication channels; wherein the first baseband system and the second baseband systems are distinct baseband systems, and wherein the indication to allocate the un-utilized transmission power is based on subtracting from an overload setting; a current total power utilized by the first industry standard wireless system and the second industry standard wireless system minus the scheduled power in a previous time interval; a delta between a current supplemental power and a predicted supplemental power for the first industry standard wireless system; and a marginal power that comprises at least one parameter setting.

The prior art of record fails to teach the claimed subject matter as claimed and substantially connected in claims 8-12.

Regarding claim 13, Mantha et al. teaches providing a first wireless system (voice service, V sub 1 to V sub V of Fig. 1) and a second wireless system (data service, D sub 1 to D sub z of Fig. 1) for a plurality of wireless units 44 and 48 (Fig. 1); obtaining a plurality of input signals corresponding to a plurality of predicted transmission power allocations (Sections 0015-0017 and 0080 or 105 of Fig. 4) and a plurality of current transmission power allocations 110 and 115 (Fig. 4); determining from the plurality of input signals whether the second wireless system may utilize transmission power from the first wireless system 110 and 115 (Fig. 4); and allocating transmission power to the second wireless from the first wireless system for at least one communication channel based on an indication of transmission power that is un-utilized

by the first wireless service system 110, 115, 120, and 125 (Fig. 4, Sections 0008-0010 and 0057-0069).

Lachtar teaches a first industry standard wireless system 104, 108A/B, and 110A/B (Fig. 1) and a second industry standard wireless system 106, 112A/B, and 114A/B (Fig. 1) and wherein the first industry standard wireless system and the second industry standard wireless system are distinct industry standard wireless systems (both BTS 108A and 108B or 110A and 110B [Fig. 1] are separate which therefore are distinct industry standard wireless systems since they have different coverage areas etc.).

Note, Lachtar deals with allocation (Figs. 1 and 2) between two systems (applicant does not state the two systems are specifically different, ex. CDMA2000 1x for the first and CDMA 2000 1x EVDV for the second) which is similar to applicant's invention of power allocation.

The prior art of record fails to teach a method for allocating transmission power comprising providing a first industry standard wireless system and a second industry standard wireless system for a plurality of wireless units; obtaining a plurality of input signals corresponding to a plurality of predicted transmission power allocations and a plurality of current transmission power allocations; determining from the plurality of input signals whether the second industry standard wireless system may utilize transmission power from the first standard wireless system; allocating transmission power to the second industry standard wireless system from the first industry standard wireless system for at least one communication channel based on an indication of transmission power that is un-utilized by the first industry standard wireless system; wherein the first

industry standard wireless system and the second industry standard wireless system are distinct industry standard wireless systems, and wherein the indication of transmission power that is un-utilized is based on subtracting from an overload setting a current total power utilized by the first industry standard wireless system and the second industry standard wireless system minus scheduled power in a previous time interval; a delta between a current supplemental power and a predicted supplemental power for the first industry standard wireless system; and a marginal power that comprises at least one parameter setting.

The prior art of record fails to teach the claimed subject matter as claimed and substantially connected in claims 13-18.

Regarding claim 19, Mantha et al. teaches receiving a plurality of input signals corresponding to at least one predicted power allocation (Sections 0015-0017 and 0080 or 105 of Fig. 4) for a first wireless system (voice service, $V_{sub\ 1}$ to $V_{sub\ V}$ of Fig. 1) and at least one current power allocation for the first wireless service system 110 and 115 (Fig. 4) and a second wireless system (data service, $D_{sub\ 1}$ to $D_{sub\ z}$ of Fig. 1); determining from the plurality of input signals whether non-utilized transmission power from the first wireless system may be allocated to the second wireless system 110 and 115 (Fig. 4); and providing an indication to allocate non-utilized transmission power from the first wireless system to the second wireless system to a scheduler 110, 115, 120, and 125 (Fig. 4, Sections 0008-0010 and 0057-0069).

Lachta teaches a first industry standard wireless system 104, 108A/B, and 110A/B (Fig. 1) and a second industry standard wireless system 106, 112A/B, and

114A/B (Fig. 1) and wherein the first industry standard wireless system and the second industry standard wireless system are distinct industry standard wireless systems (both BTS 108A and 108B or 110A and 110B [Fig. 1] are separate which therefore are distinct industry standard wireless systems since they have different coverage areas etc.).

Note, Lachtar deals with allocation (Figs. 1 and 2) between two systems (applicant does not state the two systems are specifically different, ex. CDMA2000 1x for the first and CDMA 2000 1x EVDV for the second) which is similar to applicant's invention of power allocation.

The prior art of record a method for allocating power, the method comprising the acts of receiving a plurality of input signals corresponding to at least one predicted power allocation for a first industry standard wireless system and at least one current power allocation for the first industry standard wireless system and a second industry standard wireless system; determining from the plurality of input signals whether non-utilized transmission power from the first industry standard wireless system may be allocated to the second industry standard wireless system; providing an indication to allocate non-utilized transmission power from the first industry standard wireless system to the second industry standard wireless system to a scheduler; wherein the first industry standard wireless system and the second industry standard wireless system are distinct industry standard wireless systems, and wherein the indication to allocate non-utilized transmission power is based on subtracting from an overload setting; a current total power utilized by the first industry standard wireless system and the second industry standard wireless system minus the scheduled power in a previous time

interval; a delta between a current supplemental power and a predicted supplemental power for the first industry standard wireless system; and a marginal power that comprises at least one parameter setting.

The prior art of record fails to teach the claimed subject matter as claimed and substantially connected in claims 19-21.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Judd discloses a shared tower system for accomoating multiple service providers. Bruin discloses a total radio network solution for GSM/EDGE. Mortensen discloses operating a cellular telecommunication system. Korale discloses a resource management apparatus and a method of resource management therefor. Macridis discloses a bandwidth allocation method and apparatus. Boariu discloses a system for scheduling weighted transmissions form multiple antennas. Silva discloses a software analysis tool for CDMA system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW WENDELL whose telephone number is (571)272-0557. The examiner can normally be reached on 8:00-5:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew Wendell/
Primary Examiner, Art Unit 2618

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